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BOOK REVIEW

World Directory of Crustacea Copepoda of Inland Waters, II – Cyclopiformes, B. Dussart, D. Defaye. Backhuys Publishers BV, Leiden, The Netherlands (2006). 354pp., €84.00, Paperbound, ISBN: 90-5782-175-2

Some 15–20 years ago biological systematics of copepods used to be one of those traditional disciplines offering only limited excitement. Taxonomists agreed or disagreed on their results, but other then morphological, physiological or ecological characteristics they did not have much at hand to tell right from wrong. Then molecular markers became available turning over the whole field. Now a real "natural system of copepods" might be envisaged that is not only based on morphology, physiology and ecology but also related to heritage.

Nevertheless, provided all the tools that molecular genetics can offer, finally the question remains: How does the genotype translate into the phenotype? In other words, besides all other methods to characterize a given species we are put back to morphology-based systematics. This ambiguous relationship of genotype and phenotype is especially complicated within the order of Cyclopiformes, where some of its genera are known to be notoriously polymorphic. Therefore, to relate genetic and morphological studies, one has to find out first "what is out there" in the oceans, lakes and rivers, just to mention the major habitats of the group.

B. Dussart and D. Defaye took the challenge of collecting all the available information on Cyclopiformes dwelling in inland waters, presenting the present status of knowledge on the group. Although there might not be anything spectacular to this directory, it is essential to "copepodologists" throughout the world.

A total of 66 genera are listed, providing information on the pertinent species and their home-territory. Synonyms are quoted, which allow the reader to follow the trail of any citation to its present valid name. For each genus, the type-species is given. The cited references deliver extensive information on morphology, physiology, biology and ecology of the species. Although the authors do not claim this inventory to be exhaustive, they have been trying to be as complete as possible. The book was clearly arranged and is therefore easy to survey.

In their concluding remarks, Dussart and Defaye emphasize that "copepodology" is a vital branch of biological systematics. During the last few years 15 new genera and 225 new species have been described. New taxa are likely to be discovered thereby enlarging our knowledge on this important group of inland waters zooplankton. Besides morphological, physiological and ecological characteristics, the use of molecular markers is progressively applied. Their directory on Cyclopiformes is certain to foster this field of research.

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